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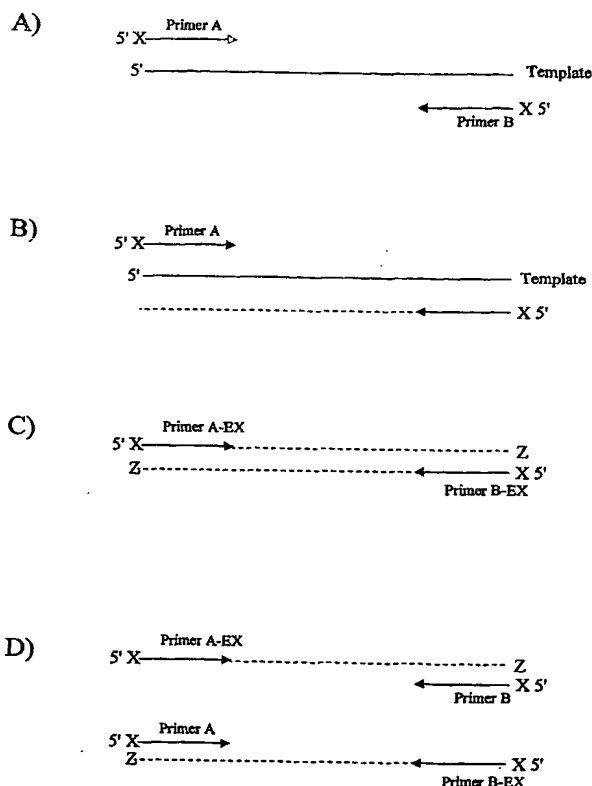
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(54) Title: POLYMERASE INHIBITOR AND METHOD OF USING SAME



(57) Abstract: The present invention provides nucleic acid based polymerase inhibitors and methods for reducing non-specific polymerase extension and amplification in nucleic acid amplification reactions. The polymerase inhibitors provide a double stranded nucleic acid portion that is recognized by a polymerase enzyme as a template for extension but is incapable of being extended by the polymerase enzyme. The polymerase binds to the polymerase inhibitor which sequesters the enzyme until the temperature achieves a level that denatures the double stranded portion of the inhibitor after which the polymerase is released and can then catalyze nucleic acid extension.



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